

United States of America
FEDERAL COMMUNICATIONS COMMISSION
EXPERIMENTAL
RADIO STATION CONSTRUCTION PERMIT
AND LICENSE

EXPERIMENTAL

(Nature of Service)

XC FX

(Class of Station)

WK2XEG

(Call Sign)

0507-EX-TC-2019

(File Number)

NAME Raytheon Company

Subject to the provisions of the Communications Act of 1934, subsequent acts, and treaties, and all regulations heretofore or hereafter made by this Commission, and further subject to the conditions and requirements set forth in this license, the licensee hereof is hereby authorized to use and operate the radio transmitting facilities hereinafter described for radio communications in accordance with the program of experimentation described by the licensee in its application for license.

Operation: In accordance with Sec. 5.3(c) of the Commission's Rules

Station Locations

(1) Andover (ESSEX), MA - NL 42-38-16; WL 71-11-18

Frequency Information

Andover (ESSEX), MA - NL 42-38-16; WL 71-11-18

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1030 MHz	FX	6M80V1D	75 kW (ERP)	0.003 %
1090 MHz	FX	6M80V1D	15.3 W (ERP)	0.003 %

Special Conditions:

- (1) One or more frequency assignments were coordinated prior to authorization with FAA Headquarters, 800 Independence Avenue, S.W., Washington, DC 20591; Telephone: 202-267-8699.
- (2) The station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (3) Licensee should be aware that other stations may be licensed on these frequencies and if any interference occurs, the licensee of this authorization will be subject to immediate shut down.

This authorization effective January 23, 2020 and
will expire 3:00 A.M. EST March 01, 2021

**FEDERAL
COMMUNICATIONS
COMMISSION**



Special Conditions:

- (4) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (5) This authorization is issued for the express purpose of conducting experimental operations described in the related application and required by the U.S. Government; contract number FA8730-18-C-0018. The use of this radio station in any other manner or for any other purpose will constitute a violation of the privileges herein authorized. Except as subsequently authorized by the Commission, this radio station shall not be operated after the expiration date of the contract designated in the related application and enumerated above.
- (6) Stop buzzer point of contact is Kirk Fisher at (978) 470-4244, (978) 302-0770.
- (7)
 - (a) ATC MUST BE INFORMED OF TESTING,
 - (b) PULSE DURATION = $FX\ 0.45\ \mu SEC$,
 - (c) ON 1030 MHZ THE IFF RADAR AZIMUTH IS 251 DEGREE AND MAX ERP IS 100W (OR MAY CHOOSE 100W PEAK TRANSMITTER PWR),
 - (d) MODES 1,2,3/A,C (I.E., SIF) ONLY,
 - (e) AVERAGE PRR IS 367.8 INTERROGATIONS PER SEC AND STAGGERED,
 - (f) INTERROGATIONS LIMITED TO A 15 SECOND BURST FOLLOWED BY A ONE MINUTE PERIOD OF QUIET,
 - (g) MANUAL INTERROGATIONS ONLY,
 - (h) CERTIFIED TESTER RESPONDING ON 1090MHZ LIMITED TO 0.1 W MAX ERP (OR MAY CHOOSE 0.1W PEAK PWR),
 - (i) TESTER MODE C RESPONSE MUST BE AN ALTITUDE OF EITHER 600 FT BGL OR 90K AGL IF SIMULATING AIR MODE OR IF IN GROUND MODE THEN MODE C MUST REPORT GL.